## **Delaware**



- Fully Supporting
- Threatened
- Partially Supporting
  - Not Supporting
- Not Assessed
- Basin Boundaries (USGS 6-Digit Hydrologic Unit)

This map depicts aquatic life use support status.

For a copy of the Delaware 1998 305(b) report, contact:

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### **Surface Water Quality**

Delaware's rivers and streams generally meet standards for aquatic life uses, but 98% of the assessed stream miles and 80% of the surveyed lake acres do not meet bacteria criteria for swimming. Bacteria are the most widespread contaminant in Delaware's surface waters, but nutrients and toxics pose the most serious threats to aquatic life and human health. Excessive nutrients stimulate algal blooms and growth of aquatic weeds. Toxics

resulted in 14 fish consumption restrictions in three basins, including Red Clay Creek, Red Lion Creek, the St. Jones River, and the Delaware Estuary. Agricultural runoff, urban runoff, municipal sewage treatment plants, and industrial dischargers are the primary sources of nutrients and toxics in Delaware's surface waters.

Delaware did not report on the condition of wetlands.

### **Ground Water Quality**

High-quality ground water provides two-thirds of Delaware's domestic water supply. However, nitrates, synthetic organic chemicals, saltwater, and iron contaminate isolated wells in some areas. In the agricultural areas of Kent and Sussex counties, nitrates in ground water are a potential health concern and a potential source of nutrient contamination in surface waters. Synthetic organic chemicals have entered some ground waters from leaking industrial underground storage tanks, landfills, abandoned hazardous waste sites, chemical spills and leaks, septic systems, and agricultural activities.

# Programs to Restore Water Quality

The Department of Natural Resources and Environmental Control (DNREC) adopted a watershed approach to determine the most effective and efficient methods for protecting water quality or abating existing problems. Under the watershed approach, DNREC will

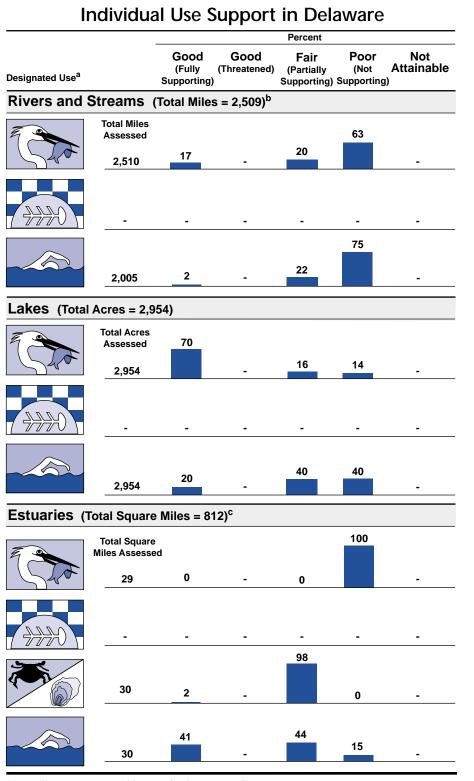
evaluate all sources of pollution that may impact a waterway and target the most significant sources for management. DNREC has targeted five basins for development of integrated pollution control strategies: Appoquinimink River, Christina River, Indian River Bay/Rehoboth Bay/Little Assawomen Bay, Murderkill River, and Nanticoke River.

Delaware's Wellhead Protection Program establishes cooperative arrangements with local governments to manage sources of ground water contamination. The state may assist local governments in enacting zoning ordinances, site plan reviews, operating standards, source prohibitions, public education, and ground water monitoring.

# Programs to Assess Water Quality

Delaware's Ambient Surface Water Quality Program includes fixed-station monitoring and biological surveys employing rapid bioassessment protocols. Monitoring within the Fixed Station Network is conducted monthly to quarterly for each basin in Delaware. Delaware is developing and testing new protocols for sampling biological data in order to determine whether specific biological criteria can be developed to determine support of designated uses.

- Not reported in a quantifiable format or unknown.
- <sup>a</sup> A subset of Delaware's designated uses appear in this figure. Refer to the state's 305(b) report for a full description of the state's uses.
- blincludes nonperennial streams that dry up and do not flow all year.
- <sup>c</sup> Does not include waters under jurisdiction of the Delaware River Basin Commission.



Note: Figures may not add to 100% due to rounding.